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ABSTRACT

The seven articles in this journal issue examine trends and topics related to radio and other broadcast media. The articles discuss the following: (1) current trends in radio audience measurement, (2) the policy implications of radio research, (3) a research study of the relationships between age and radio usage, (4) the role of the part-time radio research consultant, (5) the potentialities of Viewdata (or Videotex) systems, (6) cautions about the electronic revolution, and (7) the need for teaching a revised wire services phonetics system to broadcasters in the college and university. (GT)

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BEA symposium:

'Research in radio'

(Editor's Note: The following four articles were presented as part of a panel on "Research in Radio," April 11, 1980, at the BEA convention in Las Vegas, Nevada. The panel moderator was ALAN M. RUBIN of the University of Wisconsin, Parkside.)

Audience measurement trends

By KATHRYN LENARD
National Broadcasting Company

I have been asked to speak about current trends in radio audience measurement. But in order to understand the current state of affairs it is necessary to go back and look at some history.

For a period of 10 years—from 1966 to 1976—the radio audience measurement field was relatively quiet. There were two rating services measuring local market radio—Pulse and ARB. Each had its fair share of agency and station support.

For a variety of reasons Pulse came into disfavor among agencies and radio stations, and in 1978 was forced to close its doors after 37 years in the business. In the intervening years since the demise of Pulse, several rating services have attempted to fill the gap. Yet every single one of the major contenders has failed.

The founding of a successful second rating service has been referred to as radio's "Catch 22." Radio stations want an additional rating service, but most feel they can't support it until advertising agencies use it for buying purposes. Agencies, on the other hand, will not quickly accept a new service—most want to track the results produced over a period of time—and it can take as long as a year for them to complete their evaluation.

Finally, no research supplier is willing to accept the fact that he must take a four- or five-million dollar gamble before he can start to be profitable.

With all of these problems, why does the quest for a second service continue?

We must never loose sight of the reason why ratings exist. They are the primary tool for the buying of radio time, particularly on the national level. People often refer to it as the "rating game"; but if it is a game, it is one that is played for very high stakes. A half a share point can represent as much as a half-million dollars in billing to a New York radio station.

The individual station demographic ratings used for buying purposes require enormous sample sizes for accuracy—sample sizes that are simply unaffordable. The results from current sample levels do contain considerable bounce. In many cases the statistical error in an average ¼ hour rating is, in fact, greater than the rating itself.

Since the majority of markets are only measured two times per year, a station must live with that error and be bought or not bought on the basis of that error for as long as six months. Obviously, a second rating service gives that station a second chance.

Yes, radio is a very difficult medium to measure accurately. Consider these facts:

1. Radio has considerably lower usage levels than television. The audience to radio in the average ¼ hour during its prime time, morning drive is only 25 percent compared to TV prime time usage levels of 60 percent or more.

2. Radio audiences are highly fragmented—even more so today than 10 or 15 years ago. In 1966 there were 25 stations with reportable audience in the New York ARB. In the latest report, January-February 1980, there were 45.

In 1966 the top rated station in New York in morning drive was WOR with an Adult

18-plus rating of 4.7. In the latest report WOR was still the top rated station, but its rating was only a 2.5, virtually half the size.

3. Radio listening is highly segmented. It is a **people**, not a household medium. 18-24 year old males tend to listen to AOR, Blacks tend to listen to Rhythm and Blues or disco stations, and the audience to talk radio is heavily skewed towards adults 50 years and over.

4. While the average person spends almost as much time listening to radio as he does viewing television in a day (there's only 20 minutes difference,) the specifics of listening—at what times and to which stations—are a lot harder to capture than the specifics of viewing.

For the average individual, radio listening occurs at many points during the day and in many different locations—at home in the morning, in the car on the way to work, on the patio over the weekend, etc.

Of course increased sample size is only part of the solution for more accurate audience measurement. We know from the many pilot studies that have been done and from the results of other completed surveys that ratings for the medium as a whole, for format types, and for individual stations can vary dramatically solely because of the methodology used.

And many researchers feel that Arbitron's methodology is not really the best technique for measuring the radio audience in all its complexity.

Arbitron's basic instrument is the personal seven-day diary. Ideally, the diary keeper records exposure as it happens, thus minimizing "forgetting."

In practice. however, many diaries are not kept up to date. Moreover, there is evidence that diary fatigue sets in. Proof of this is the fact that there is a continual decay in listening levels from diary day one through day seven.

Use of the telephone recall technique results in higher levels of radio usage—ranging from 10 percent to 50 percent or higher, depending on the demographic. This fact has been confirmed by five different telephone recall studies.

Response rate is crucial to the representativeness of a sample. Arbitron's response rate currently is 40 percent. Telephone techniques produce response rates of 60 percent or better.

A study conducted by Arbitron among non-cooperators indicates that diary keepers did more listening than non-diary keepers to Beautiful Music and News-Talk stations and less listening than non-diary keepers to contemporary and Black stations. Comparisons between Arbitron and telephone recall studies confirm these results. This suggests that different rates of diary cooperation across segments of the population cause biases by station format types.

And there are other areas of concern such as diary editing, multiple respondents per household, and non-uniform measurement techniques for all racial groups which, unfortunately, time does not allow me to discuss today.

Let me just quickly tell you what I see for the future of radio audience measurement.

For the near term—the next five years or so—Arbitron will no doubt remain the dominant primary rating source. Catch 22 will continue to prevent another service from making it. The best we can hope for during this period is continued improvement of Arbitron, albeit within the framework of the diary technique.

Looking further into the future, I predict that we will see technological advances that will allow for more accurate measurement on an affordable basis. Even now there is talk of the possibility of an electronic device that would be worn by the respondent. Similar to the Nielson audimeter, it would record the time of listening and the station tuned to.

In the meantime, if any of you happen to fall into the Arbitron sample, please cooperate and fill in your diary accurately—we need all the help we can get.

Audience policy implications

By LARRY PATRICK
National Association of Broadcasters

Thank you for the invitation to speak at this year's BEA convention. It is a pleasure to leave the "assumed wisdom" found on the banks of the Potomac to meet with my former colleagues and friends. It was not long ago that I sat on the other side of this podium.

But I am not here to discuss my memories of university life—fond though they are. Instead I would like to share some perspectives on the policy implications of radio research. This view is the one from Washington and from those who regulate broadcasting. First I would like to comment on radio audience measurement concerns and then on economic and policy research.

Ratings are really the backbone of the broadcast industry. Stations live and die according to the "numbers" because that is the simple reality of American broadcasting. Stations exist not only in the "public interest" environment, but also in the economic and business one. Without the "numbers"—which reflect audiences and resulting advertiser support—there would be no commercial broadcasting system as we know it.

That system is currently under intense examination by the FCC, NTIA and the Congress. Chairman Ferris of the FCC appears strongly committed to the concept of expanding the ranks of broadcasters. He is moving on several fronts to bring "diversity" to the communication industry.

Nine kHz, the directionalizing FM signals, breaking down the clear channel stations, and expanding the AM band are just some of the FCC's recent moves toward increasing diversity. All are designed to foster more competition and allow more persons—particularly minorities—to enter the ownership ranks. NAB realizes the importance of assisting more minorities to enter the ownership ranks and has established a $15 million fund to assist in the purchase of stations. NAB also welcomes increased competition because the broadcasting industry was built on competition.

But the broadcast regulators—and those persons who would make use of these expanded opportunities to enter the broadcasting industry—must realize the importance of ratings to the business of broadcasting. Without sound audience measurement, applicants for some stations are destined for financial disasters. And the FCC is not helping this problem by ignoring the economic realities of adding stations without a thorough understanding of the marketplace.

Let me give you some examples. The FCC's avowed intention is to create more opportunities for minorities to move into broadcasting. First, the Commission has not considered what adding stations to existing markets will do for the audience and advertising dollars in those markets. Adding a minority-oriented station to a market where there is already a small minority audience may simply doom the new broadcaster to bankruptcy. The Commission needs to analyze markets and move carefully when adding stations. Second, there are problems for these stations in the area of ratings. The major rating services acknowledge that they have difficulty in measuring Black and Hispanic audiences. A study conducted by Arbitron for the NAB in San Antonio, Texas, for example, demonstrated that Spanish-speaking audiences were underrepresented in the Arbitron sample. The result was lower numbers for the Spanish-language station in San Antonio.

Similarly, Blacks are often not adequately measured. Arbitron, which uses a telephone retrieval (TR) method to gather Black listening data, has admitted that the TR procedure is inadequate. Tests of a more sophisticated TR procedure are now under development under the guidance of NAB's Committee on Local Television and Radio Audience Measurement (COLTRAM). A series of preliminary tests in the Philadelphia market are now being reviewed.

The result of these problems—problems of inadequate planning and inaccurate audience measurement which particularly affect minority formatted stations—is that, despite all of the efforts of the Washington regulators to open up the broadcast ownership ranks, little progress will be made without an understanding of

the marketing problems facing these broadcasters.

The question really is what will the current FCC initiatives accomplish if they award a minority applicant a station in a market which cannot support such a station? And also, unless minority broadcasters can be assured that the rating services are accurately measuring their audiences, then all of the current moves in Washington are of limited value.

So, what can be done to insure the integrity of the audience measurement system so that it accurately reflects audiences and insures new broadcasters at least a fighting chance?

I, for one, have a great deal of confidence in the marketplace solution for the audience measurement problems. I believe that the Broadcast Rating Council, COLTRAM,. the Radio Advertising Bureau's GOALS Committee, and NAB's Cooperative Research Groups can exert enough pressure on the ratings companies to improve their procedures.

Additionally, there is strong foundation interest in the development of a "qualitative" ratings system. Although primarily designed for television, such interest is encouraging to me.

The worst alternative would be for the policy makers in Washington to believe that they are better equipped to monitor the ratings than is the industry.

Policymakers, for the most part, appear ill-equipped to discuss the methodological complexities of broadcast ratings. A wholesale investigation—perhaps like the one now being considered by NTIA—would shake advertiser and audience confidence in the system and most likely not improve the system overall. The gradual and constant improvement spurred by industry committees is a much better alternative.

My disdain for government intervention in the audience measurement area does not preclude some governmental concern and understanding for the system. Government should encourage—but not regulate—the ratings companies into providing improved services for the broadcasting industry.

Most importantly, the FCC should focus its attention and concern on the marketplace realities of broadcasting. All too often, policies are formulated and regulations announced with inadequate policy and economic analyses. And sometimes, policy is selected in direct opposition to research materials already developed.

The FCC's recent 9 kHz decision is an example of the Commission moving forward without any real analysis of the engineering or economic consequences of a shift from 10 to 9 kHz. The Commission's past decisions—on crossownership, children's television, equal employment, and radio deregulation to name but a few—are examples of Commission action based on inadequate policy research.

I would be remiss if I did not take this golden opportunity to place some of the responsibility for this lack of adequate policy research squarely on your shoulders. How I remember the times when I sat in the audience as a professor and listened to the industry spokespersons lay problems at our collective feet. Now it is my turn.

Professors are all too often busy with teaching students about the industry and writing articles for academic journals to spend time considering the direction of the industry. I firmly believe that professors can produce high quality research which is capable of having an impact on national communications policy. I know that it can be done because there are several professors in this audience who have done such work for the NAB and the Commission.

Speaking for the industry, I can tell you that we often are looking for a strong policy analysis by a neutral observer such as a professor. Recently we have begun to make more and more use of professors. The Commission likewise has employed professors, particularly in its recent children's television rulemaking.

But with a few exceptions, it is often difficult to persuade professors to forsake their daily workload for a few days or weeks of research into major broadcast issues. I can tell you from experience that those professors who have completed studies for us have had a significant impact on communications policy. I know that many of you have insights that you could offer policymakers and I urge you to become involved in the process. NAB would certainly be interested in hearing your comments on proposed legislation, and I am sure that agencies such as the FCC, NTIA, and the communication Subcommittees in Congress would also.

The question was whether there was a need for research in the areas of audience measurement and communications policy. The answer certainly is yes—and you can be a major force in each area. Speaking for those of us in Washington, we hope to hear from you.

Patterns in age differences

By ALAN M. RUBIN
University of Wisconsin, Parkside

Radio has changed radically in the past 20 years. There has been a vast increase in the number of outlets, to more than 8,700 at present. With this expansion, and with competition from television, radio has seen increased reliance on local advertising dollars, proliferation of locally-oriented stations, greater variation in formats, growth of FM stations, expanded radio syndicated services, and augmented opportunities for specialization, in particular in demographic concentration. In light of these changes, much of the earlier research is now outdated and of reduced explanatory and heuristic value. Current research reflecting awareness of these changes is needed to explain audience usage and social effects of radio. The present investigation considers age patterns in radio usage.

Some of the more recent research has considered the differential appeals of radio for various social and demographic groups in society. In suggesting that radio is a portable friend, Dominick (1) observed that low peer-group-membership children listened to radio more for informational and less for entertainment reasons. Peterson and Davis (2) analyzed Puise Corp. data and noted that top forty radio formats appeal to younger groups, while middle-of-the-road and beautiful music audiences are older. Lull, Johnson and Sweeney (3) also found age differences in preferred program formats; the audience for rock music and news formats were older. They noted that, "the most meaningful format discrimination was made by age as a primary component."

As an important aspect of communication needs and processes, age has been considered principally in relationship to social companionship and information seeking. The media, it is suggested, provide a link to society and function as surrogates for interpersonal communication, particularly for older persons and those deprived of extensive human interaction. (4) (5) (6) From this perspective, for example, use patterns of talk radio have been examined. (7) The media have also been found to serve as an important source of information for older persons more than for younger individuals. The beginnings of interest in media information emerge in adolescence and increase through later stages of adulthood. (8) (9) (10) Radio, for example, has been reported as being used by older persons for news summaries, weather reports, and information about local affairs. (11)

Several of the traditional, intuitive beliefs about the relationships between age and radio format preference have been confirmed in these studies. Most of the data about aging and the media that do exist are television-related; information about aging and radio usage is much less abundant. The primary objective of the present investigation is to generate a broader, systematic analysis of age as a significant factor in contemporary radio use. There is a need to consider the age component in light of not only format preference, but motivations for radio use, reasons for station preference, location of radio listening, structure of daypart listenership, and preferences for news programming.

Following from the previously identified research studies in the areas of aging or radio use, several relationships are anticipated. As compared to younger individuals: (1) older persons will listen to radio more often in the home; (2) older persons will listen to radio during the hours when more information is presented (e.g., expanded early morning newscasts); (3) older persons will cite informational and companionship motivations for radio listening; (4) older persons will identify news, beautiful music, and middle-of-the-road format station preferences; (5) older persons will cite informational reasons for favoring a particular station; and (6) older persons will indicate a desire for more in-depth, longer newscasts.

Methods

Personal telephone interviews were conducted in one midwestern city situated within the urban corridor between Chicago and Milwaukee. Approximatedly 50 AM and FM signals are available in the community. Interviews took place during

weekday and weekend daytime and evening hours by trained interviewers. There were 531 names randomly selected from the city telephone directory and 378 completed interviews.

The antecedent measure of the investigation was age. Respondents were asked to indicate in which of the following age groups they placed: below 18; 18 to 34; 35 to 49; 50 to 65; and over 65. Answers to this question were crosstabulated with replies to the several dependent measures assessed by the questionnaire.

Individuals were asked to verbalize their main reasons or principal motivations for radio listening. The open-ended responses were placed in 10 categories by two independent coders (94 percent agreement); 90 percent of the replies fell within four principal "motivation" categories: music-entertainment, news-information, companionship, and relaxation. Categories containing fewer than five percent of the total responses were eliminated from further analysis.

Respondents were asked to name their favorite radio station. The formats of these stations were identified by adapting the listing of programming formats provided in **Broadcasting Yearbook**. (12) Categories with less than five percent of the total responses were excluded from subsequent analysis, resulting in six principal "format" categories: beautiful music, country, middle-of-the-road, news-talk, progressive rock, and contemporary-top forty.

Individuals were asked to verbalize reasons the identified station was, in fact, their favorite station. The open-ended replies were assigned to 10 categories by two independent coders (93 percent agreement); 94 percent of these reasons fell within four principal "reason" categories: music, news-information, programs-variety, and announcers-personalities. Categories with fewer than five percent of the total responses were eliminated from succeeding analysis.

Several additional questions regarding radio listening behavior were asked. To determine when they listened to radio, respondents were presented with a series of questions asking them whether they typically listened to radio during each of four dayparts: 6 a.m. to 10 a.m., 10 a.m. to 2 p.m., 2 p.m. to 7 p.m., and 7 p.m. to midnight. To ascertain listening locale, individuals were asked to specify whether they listened to radio most often in the home, car, office, or elsewhere. Finally, respondents were asked to indicate how long they felt an ideal newscast should be. Based upon answers given, replies were subsequently divided into three categories: 0 to 5 minutes; 6 to 14 minutes; and 15 minutes or longer.

Results

The several hypothesized relationships between age and radio usage were mostly confirmed. It was initially anticipated that older persons would listen to radio more often in the home as compared to younger persons. The information in Table 1 generally supports this expectation. The principal differences, however, were between the oldest group and those in the 18 to 49 age range. Certainly of no surprise was the proportion of the below 18 group who also listened to radio frequently at home. In fact, a majority of respondents in all age brackets identified the home context as their usual listening habitat. Very few identified the office or other places. There was a consistent decline from age 35 to the older groups of those who usually listened to radio in the car.

Older persons were expected to listen to radio more frequently during the earlier morning hours when expanded information is often presented. The information in Table 2 confirms this expectation. More than three quarters of the over 65 group responses and almost two-thirds of the 50 to 65 age group replies fell within the 6 a.m. to 2 p.m. dayparts. The frequency of listening for both of these groups declined after 2 p.m. On the other hand, almost two-thirds of the below 18 group responses and almost one-half of the 18 to 34 age group replies fell within the 2 p.m. to midnight dayparts. There was a noticeable decline for all age groups from the early morning time period to the second daypart. Responses of the three younger age groups indicated increased listenership from the second time period to the afternoon and early evening daypart. In general, the trends in age of audience listenership were rather consistent for all four dayparts.

With regard to listening motivations, it was also anticipated that older persons would cite more informational and companionship reasons than would younger individuals. The information in Table 3 provides partial support for this hypothesis. Informational and entertainment motivaions revealed extremely consistent trends according to listener age groups. Almost all of the

listening motivations of the below 18 group were in the music-entertainment category: the frequency of mention for this motivation steadily declined with increases in age. More than three-quarters of the listening reasons of the over 65

TABLE 1

Usual Radio Listening Location by Age of Audience Members

LISTENING LOCATION	AGE GROUP RESPONSES				
	Below 18 (N=37)	18 - 34 (N=129)	35 - 49 (N=67)	50 - 65 (N=77)	Over 65 (N=43)
Home.....	86.5%	66.7%	65.7%	75.3%	95.3%
Car.....	13.5	32.6	29.9	22.1	4.7
Office-Elsewhere.....	0.0	0.8	4.5	2.6	0.0

TABLE 2

Weekday Daypart Listening by Age of Audience Members

WEEKDAY DAYPART	AGE GROUP RESPONSES				
	Below 18 (N=82)	18 - 34 (N=266)	35 - 49 (N=134)	50 - 65 (N=145)	Over 65 (N=65)
6:00 a.m.-10:00 a.m.....	26.8%	28.6%	35.1%	40.7%	41.5%
10:00 a.m.-2:00 p.m.....	7.3	22.6	20.9	23.4	33.8
2:00 p.m.-7:00 p.m.....	36.6	30.1	29.1	21.4	9.2
7:00 p.m.-Midnight.....	29.3	18.8	14.9	14.5	15.4

TABLE 3

Principal Radio Listening Motivations by Age of Audience Members

LISTENING MOTIVATIONS	AGE GROUP RESPONSES				
	Below 18 (N=37)	18 - 34 (N=142)	34 - 49 (N=79)	50 - 65 (N=93)	Over 65 (N=39)
Music-Entertainment.....	97.3%	59.9%	43.0%	33.3%	12.8%
News-Information.....	2.7	14.1	40.5	57.0	82.1
Companionship.....	0.0	16.2	10.1	6.5	5.1
Relaxation.....	0.0	10.6	6.3	3.2	0.0

group were in the news-information category; the salience of this motivation constantly declined with decreases in age. Companionship was absent from the motivations of the youngest group, but then showed a consistent decline from its initial mention in the 18 to 34 age group to the over 65 group. Older listeners were less apt to cite companionship and relaxation motivations than were respondents in the middle-age groups.

Older persons were also expected to prefer beautiful music, news and middle-of-the-road station formats as compared to younger listeners. The information in Table 4 shows that these anticipated relationships were generally evident. The older age groups indicated an overwhelming partiality toward middle-of-the-road stations, a somewhat less obvious preference for news-talk and beautiful music formats, and a disinclination to identify comtemporary-top forty, progressive rock and country stations. The younger age groups exhibited a clear preference for top forty formats, an inclination for progressive rock station choices, and little interest in news-talk radio. Middle-of-the-road and news-talk format preferences initially surfaced in the 18 to 34 age group and consistently increased with age increments. Partiality for contemporary-top forty and progressive rock formats rapidly diminished after age 34. Beautiful music station choices were most evident between the ages of 35 and 65. Country format preferences appeared mainly within the 18 to 49 age range.

Consistent with their radio listening motivations and station format preferences, it was anticipated that older persons would provide more news and information reasons for favoring a particular station than would younger persons. The information in Table 5 verifies this expectation. While music was the overwhelming reason for selecting a station of the younger age groups, news-information was the predominant reason of the older age groups. There was a steady increase in news-information reasons and a consistent decline in music reasons with increases in age. It was not until the 50 to 65 age bracket that information surpassed entertainment as the main reason for station preference. The content or variety of programs showed a regular increase as a reason for favoring a station with age increments.

Although it was not a factor for the over 65 group, the radio personality was a reason to favor a particular station for some audience members in the other age groups.

Because of their principal use of radio for news and information, it was also believed that older audience members would desire more in-depth, longer newscasts than would younger listeners. The information in Table 6 strongly supports this hypothesis. While almost one-half of the below 18 group felt that the length of an ideal newscast should be five minutes or less, over three-quarters of the over 65 age group indicated that a newscast should be fifteen minutes or longer. There was a clear and consistent trend to support this strong, positive association between age and desire for longer newscasts.

Discussion

The age of radio audience members is an obvious discriminator and predictor of radio usage patterns. Younger and older listeners exhibit quite different radio listening motivations, tastes and behaviors. Younger listeners are motivated to use radio for gratifications derived from entertainment and music programming. They attend to radio mostly during later dayparts, favor contemporary and rock music formats, and prefer only a limited amount of radio news. Motivations of older listeners reflect a desire for information. These audience members mainly use radio early in the day, prefer middle-of-the-road formats (although in the 50 and older age range there are noticeable preferences for news-talk and beautiful music formats), and desire expanded newscast.

The transition years when verbalized reasons from radio use and station preference shift from entertainment to information motivations appears to be in the over 50 age bracket. Since the population distribution in this country has shown substantial increases in the upper age groups, radio needs to recognize and adapt to the vast differences in radio listening patterns between the younger, middle and senior years. The implications of these age-radio use associations are important for both radio programmers and advertisers in trying to reach and maintain a selected demographic group in the contemporary radio environment.

Though some research considers the media as surrogates for interpersonal communication for older persons, companionship seems to be a more salient

TABLE 4

Favorite Radio Station Formats by Age of Audience Members

STATION FORMATS	AGE GROUP RESPONSES				
	Below 18 (N=34)	18 - 34 (N=113)	35 - 49 (N=63)	50 - 65 (N=70)	Over 65 (N=44)
Middle-of-the-Road.....	0.0%	15.0%	39.7%	60.0%	72.7%
Contemporary-Top Forty..	61.8	46.0	15.9	1.4	0.0
Beautiful Music.....	2.9	8.0	19.0	21.4	6.8
Country.....	5.9	12.4	19.0	2.9	2.3
Progressive Rock.....	29.4	15.9	0.0	0.0	0.0
News-Talk.....	0.0	2.7	6.3	14.3	18.2

TABLE 5

Favorite Radio Station Listening Reasons by Age of Audience Members

LISTENING REASONS	AGE GROUP RESPONSES				
	Below 18 (N=39)	18 - 34 (N=121)	35 - 49 (N=73)	50 - 65 (N=75)	Over 65 (N=45)
Music.....	89.7%	71.9%	49.3%	32.0%	13.3%
News-Information.....	0.0	11.6	34.2	49.3	71.1
Programs-Variety.....	5.1	9.1	9.6	10.7	15.6
Personalities-Announcers	5.1	7.4	6.8	8.0	0.0

TABLE 6

Ideal Radio Newscast Length by Age of Audience Members

NEWSCAST LENGTH	AGE GROUP RESPONSES				
	Below 18 (N=35)	18 - 34 (N=127)	35 - 49 N=64)	50 - 65 (N=71)	Over 65 (N=37)
0 - 5 Minutes.....	48.6%	40.9%	23.1%	21.1%	8.1%
6 - 14 Minutes.....	37.1	36.2	26.6	21.1	13.5
15 Minutes or Longer.....	14.3	22.8	45.3	57.7	78.4

listening motivation for younger and middle-age audience members than for older listeners. It may be that other media perform more of a companionship function for these older persons than does radio. The scope of this investigation is limited to a systematic examination of age a factor in radio use. Future investigations need to consider how radio fits into the social fabric and communication choices for needs-gratification of various societal groups.

An entertainment-information listening motivation and radio preference dichotomy still seems most appropriate when discussing demographic and age differences in radio usage. However, entertainment and information are expansive categories. It would be important for future research to attempt an examination and definition of the component aspects of these two broad concepts.

Footnotes

1. Joseph R. Dominick, "The Portable Friend: Peer Group Membership and Radio Usage," **Journal of Broadcasting** 18, Spring 1974, pp. 161-170.

2. Richard A. Peterson and Russell B. Davis, Jr., "The Contemporary American Radio Audience," **Popular Music and Society** 6, 1978, pp. 169-183.

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The role of the consultant

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The term "broadcast consultant" has become commonplace in the broadcast industry during the past few years. Consultants are available for hire in almost every area of broadcasting, and this rapid expansion in consulting makes it difficult to present a simple discussion of the area.

Consider, for a moment, the complexities involved in broadcast consulting. It is clear that any discussion of consulting must involve a selection of alternatives. First, a list of consulting areas is varied. Those areas include the following: (1) programming: format, music selection, news, auxiliary services such as syndicated programming; (2) advertising and promotion: station promotion as well as promotion and advertising for various employees at the station; (3) state image analyses: where a station wishes to gather data on the perception the audience has of the station; (4) sales: sales training, refresher courses, sales image studies; (5) engineering: FCC requirements and advice in purchase of equipment; (6) market studies: demographic and lifestyle analyses; (7) business image studies: analysis of consumer perceptions of local merchants to be used by the sales staff; (8) general management problems: communication within the station, employee morale, motivation, employee incentives; (9) legal: including FCC regulations and other local concerns; (10) production: programming and commercial production styles; (11) news: style, content, approach; and (12) specialized research: ascertainment, personnel analysis.

This list is only a partial summary of some of the consulting areas in the industry, and does indicate that any discussion of consulting must be limited. Although some procedures and characteristics are similar among the 12 areas mentioned each has its own problems and approaches. The first step, then is to select one of the areas mentioned. For the purpose of this paper, the sales area was selected to discuss the role of the radio consultant.

A second area that needs to be narrowed before any discussion is the nature of the broadcast consultant, whether the consultant is full-time or part-time. The full-time consultant includes those persons and companies whose primary business is service to broadcasting, such as Frank Magid and Associates or McHugh and Hoffman. The academician is a part-time consultant, whose primary business is teaching. This paper will focus on the part-time consultant.

The main goal of both the full-time and part-time consultant is the same: to help broadcasters make decisions. The basic difference between the two types of consulting is the size of the operation. Size includes the number of employees, the scope of the analyses the company produces, the availability and access to markets throughout the country, the company's advertising and promotion, and so on. The full-time consultant is more likely to deal with larger stations and larger analyses, where the part-time consultant works with smaller stations and smaller projects.

The purpose of this paper is to discuss the role of the part-time radio research consultant. This is accomplished by a discussion of five major areas: (1) the general role of the part-time consultant; (2) a suggested approach for the part-time consultant; (3) the basics of consulting; (4) an example of a research approach to consulting; and (5) a short case study in the sales area.

A Caveat: consulting can be a very lucrative business. A consultant who is well prepared and organized can help a station become more successful. However, media consulting is not for everyone.

It is not uncommon, however, to see an article that stresses the need for academicians to become consultants. Broad outlines are prepared suggesting how people may enter consulting, and suggestions are made on how to sell oneself. These articles can cause problems. The most important is that pushing a person into consulting can only create anxiety and poor work.

Consulting does offer financial and psychological rewards, but the intention of this paper is not to chastise those who choose not to consult. Rather, the intention is to provide information to those who wish

to enter the field. The caveat might be stated as follows: Let the broadcast academician beware of the broadcast consulting "pusher."

General Role: The consultant's role is to provide an objective viewpoint (or data) concerning a decision that management wishes to make. Most qualified broadcast managers are aware of the alternatives involved in most decisions, but they usually wish to have support for one or more of the choices. The consultant's role is to present an objective, third party analysis of the situation. The consultant generally has no personal interest in a particular decision and therefore may be able to perceive some aspect of a problem that management might neglect because of its close involvement in the problem. A consultant should not enter a situation with the idea of making decisions. Management must make decisions; consultants must provide background information to allow for the most intelligent decision to be made.

The role of consultant as advisor is understood by those involved in the empirical side of broadcasting research. Ratings, shares, information on lifestyles, and so on, provide data for decision making. The numbers by themselves mean nothing. Researchers, whether full-time or part-time, must consider research data generated as supportive data rather than decision making data.

A Suggested Approach: The part-time consultant has neither the time nor the resources to compete with large efficient organizations. Part-time consultants should capitalize on the areas where large companies do not wish to tread: the smaller research study.

The inability or lack of desire of large companies to pursue smaller research studies is the benefit offered to part-time consultants. In fact, the smaller studies are more suited to the part-time consultant: they do not require a great deal of time and resources. A few examples of the smaller study include ascertainment, station image analysis and sales. The research is fairly simple to conduct and does not require a large support staff.

The potential working relationship between the full-time and part-time consultant can provide additional work and should not be overlooked. The relationship may turn out to be very lucrative. For example, it is not uncommon for a part-time consultant to develop additional questions during a consultation, questions which were not involved in the original study. It may be that the questions are beyond the scope of the part-time consultant, and it is at this time the consultant may suggest the use of a larger firm to collect the necessary data. It makes sense to suggest another rather than attempting a study beyond the consultant's capabilities.

However, suggesting the use of another firm does not mean that the part-time consultant has to be eliminated from the new problem. The consultant would be invaluable in developing specific questions that need to be investigated. The full-time consultant will appreciate the information. The goal should be to work with other consultants, not against them. This relationship must be explained further. A part-time consultant with a theoretical background in broadcasting can develop thoughtful and relevant questions relating to the broadcaster's problems. Full-time consultants, although many are excellent in the theoretical area, primarily are concerned with data gathering, not question formulation. The ability to develop relevant questions is an advantage a part-time consultant should not overlook. The full-time consultant generally will appreciate the time savings involved when another qualified individual develops questions for investigation.

Basics of Consulting

Each person approaches consulting in a different way, but some suggestions are provided here for those who want to begin consulting and do not know where to start. It must be emphasized that these are suggestions, not rules.

Selecting an Area: Anyone who wants to enter the consulting field needs to assess his own areas of expertise. The next consideration is what type of help the consultant can provide to station owners and managers. It is suggested that the consultant develop a fairly rigid package of offerings. A consultant who is ambiguous about what can be done for the station may not contract many clients. For example, a consultant might develop a specific measurement instrument to evaluate a station's image as perceived by listeners in the market. This method can be refined so that the instrument can be administered quickly and at a low cost to the broadcaster. Once the consultant has experience in one or two areas of broadcasting, it is easier to branch out into other areas.

Selling the Service: Broadcasters are

always willing to spend money on new programming, new ID packages, ratings, and so on, but they usually are hesitant to spend money to find out more about their station or audience. Because of this hesitancy, it is necessary for a consultant to actively pursue clients.

First, a consultant should have a business card. This simple device is an easy way to make initial contacts, and the card can be used for later reference.

A second important approach is to develop a formal presentation of a new idea. This can be done by a personal presentation to the station manager or through a printed circular that explains the new idea.

It is suggested that a beginning consultant accept only smaller studies until all procedures and problems are solved. The smaller jobs will help in learning the basics of consulting - what is expected, how to approach clients, and so on. It is also much easier to sell an idea after it has been tried in another market; the smaller study helps develop the consultant's record.

A final consideration in selling an idea is that a consultant must deliver everything that is offered. For example, surveys often involve the use of telephone interviews. Is there access to several telephones? Can interviewers be hired easily? How will the data be analyzed? These problems must be considered thoroughly before offering a service to a broadcaster. It is essential to deliver what is offered, or the consultant's record will be tarnished.

How Much to Charge: The beginning consultant should keep fees fairly low during the first few jobs. He does not want to price himself out of the market before things get going.

In the first few consulting jobs, a rough price estimate may be determined by considering all of the expenses involved in the consultation: supplies, computer time, travel, duplication of materials, secretarial help, salary for interviewers (if necessary), and so on. A profit of a hundred dollars or so may be all that can be expected until the service is well defined.

For example, assume that a consultant has been hired to conduct an ascertainment that will involve 100 subjects. An ascertainment is relatively inexpensive since surveys are already available, interviewer costs would be minimal, and computer time would be cheap. Therefore, a fair price for a study such as this might be $400 to $500 depending on the size of the market. The price may be raised or lowered in future studies depending on how much work was involved.

The basic rule in consulting fees is similar to the basic rule in developing an advertising rate card: the prices are determined by what the market will bear. But the price must be fair for the amount and type of information produced. Overpricing means fewer jobs, underpricing means too much work for no return. Fees for the first few consulting jobs are based almost totally on negotiation with the broadcaster. A consultant presents an offer, and the broadcaster makes a counter offer. A fair price usually is achieved after some discussion.

However, once a consultant has an established clientele, rates are often set and are not negotiable. If the broadcaster wants the information, he must pay the price.

A usual procedure in consulting is to charge by the project. A survey, for example, may be set at $1,000. Some consultants charge by the hour, from about $50 an hour up, or by the day, at about $300 for an 8-hour day. The key in all of these approaches is what the market will bear. If the station agrees to $800 a day, then that is considered the going rate.

The only "warning" is not to undersell consulting services. The first job of $500 may sound like a great deal, but after expenses are deducted, the profit might be only a few dollars. There is a curious phenomenon in consulting: people think "cheap" prices mean cheap services; expensive consultants will provide valuable information, inexpensive consultants will not. A consultant may offer a service for $50 an hour and not be hired, but if the fee is raised to $100 an hour the consultant may soon find that clients are interested.

A Research Approach: The term "research" usually indicates empirical analysis. However, consulting does not always involve empirical analysis. A qualitative study may be more important, and is still considered research in the true sense. An example of how qualitiative research may help in consulting is provided here to indicate how a consultant might narrow an area of interest to broadcasters. In addition, this section explains how a consultant might develop a service to help answer the problem. The area selected is sales.

The first step, then, is complete. The consulting area has been narrowed to radio sales, but further refinement is

required. What problems are present in broadcast sales? In what areas do sales managers and sales people need more information? Can specific problems be isolated? After some initial thought, it was determined that the best sources for this information are the people involved in the area. Some of the information discovered includes the following:

1. One major problem in broadcast sales relates to time management. That is, how can sales people organize their work and complete it in the least amount of time? The problem includes duplicated work, lack of organization, and a lack of specific goals necessary in completing a sale.

2. Incentives for sales people are perceived as a problem. This does not mean that sales managers have problems with developing incentives, but rather that managers are constantly trying to induce the "old pro" into producing more and better work. What kinds of things can be done to increase the professional's determination?

3. More emphasis is needed in helping sales people achieve a more professional approach to sales: to act as sales consultants rather than just "ordinary" sales people.

4. Short flight contracts are perceived as a major problem. Several major advertisers and many smaller ones are now switching to the shorter contract rather than the extended, or full year, contract. Although not much can be done about the larger companies, what can be done with the smaller business merchant who seems to think the short flight is the proper way to advertise?

5. There is a need for sales people to understand themselves better. Some sales people don't have enough confidence in themselves to perceive when a sale should be closed or when further information should be provided to the client.

6. Sales people need to make better use of the research materials available to them (RAB, NAB and so on). Much of the research information available goes unused.

7. There is a problem in the area of co-op advertising. Not enough sales people take the time to inquire about co-op and therefore are losing potential sales to local clients.

8. Refresher courses involving the fundamentals of sales are suggested. These courses would include such things as answering objections, role playing, closing a sale, and so on.

9. Some managers indicated that sales people do not take the time to learn about a client's business before attempting to make a sale.

10. Managers often lack knowledge about how to promote and advertise the station locally and nationally to try and increase awareness of the station.

These statements identify problem areas open for the broadcast consultant. They are problems listed by sales managers from different areas of the country, and for which they would like to have answers.

A few examples of consulting approaches might help explain how a consultant could pursue these problem areas.

Question 7: A growing use of short flight contracts.

Answer: In order to reach some advertisers, and change their minds about using longer flights, a consultant might develop a sales approach used to sell year contracts. This approach might involve the development of a one hour presentation which the sales staff presents to individual advertisers. During this presentation the sales person would explain the purpose of advertising, how advertising works, the ideas and theories of persuasion (that minds are not changed by one or just a few exposures to information) and finally, how the radio station can put together a communication package to help reach potential customers. The consultant's job would be to teach this hour long presentation to individual sales people at the radio station. The sales staff, in turn, could present the information to potential clients. The key here is that the presentation helps answer a major problem, and the answer to the problem is based on logical thought: that short flights do not correspond to the theories of communication and persuasion.

Question 8: Sales managers feel that refresher courses involving the fundamentals of sales would help their sales staff.

Answer: A consultant could easily design a series of seminars intended as refresher courses. These might include areas such as rating books and how to use them in sales, preparing sales calls and sales proposals, the use of co-op advertising to increase sales, role playing situations acting out a sales call, the use of various closing methods, and so on. The benefit the consultant offers in refresher courses such as these is that he or she is acting as a third party participant. There is no peer pressure from other sales

people, and the manager, whom the sales staff sees everyday, is not involved directly in the course.

Each of the 10 problems mentioned could be developed in a similar way. The consultant needs to investigate a situation, determine the problems involved in that situation, and develop a method to help solve the problem. The final step is to sell the idea to a station manager or a sales manager.

A Case Study

The following is a summary of a consultation done by the author for a small radio station in southern Georgia. This case is presented to indicate two main points: (1) not all research consulting involves empirical research; and (2) not all consulting involves highly complex problems.

As is custom in all consulting, an agreement was made with the station to keep specific details of the station's stituation out of public view. The agreement does, however, allow for non-identifiable summary information to be included in public discussions.

The problem: The station was losing more than $6,500 per month and wanted to know why.

The station: The AM radio station is located in a small town with a population under 3,000; there are some larger towns in the surrounding area. The station had been on the air for 16 months when the owners decided to take action.

The consulting problem appeared to involve four basic steps:

1. Make an analysis of the station's financial status to determine assets, income, fixed expenses, debits, and so on.
2. Find out why local merchants were not advertising on the radio station (they were buying time on other radio stations in the surrounding area).
3. Analyze the station in general: facilities, personnel, owners' plans and goals for the station, programming, and so on.
4. Set up procedures to help make the station profitable.

Results: A cursory glance at the station, the balance sheets, and discussions with the personnel indicated that the station had serious problems, but these problems seemed to have simple answers. Some of the information collected included:

Step 1: Some extraordinary expenses included: four telephone lines, four different news wire services (two state, two national); subscriptions to nine different broadcast related periodicals, music service for the automated system, and electronic logging and billing capability. The facilities appeared to be those of a station in one of the top five markets, rather than in a town of under 3,000 people.

Step 2: A brief interview with more than 80 percent of the business owners in the area provided some interesting information: all indicated an extreme dislike for the general manager of the radio station. They refused to buy advertising time as long as this individual was connected with the station.

Step 3: A small survey of local residents (N-75) showed that they enjoyed the station's programming and appreciated its service to the community. But within the station, there were serious personality clashes between employees. There were no definite job descriptions for employees, and the owners had no real idea of what they wanted to do with the station. Little advice was given to the station manager about how to operate the station. Finally, the station had only one sales person, the general manager.

Step 4: Several recommendations were provided to the station owners, including the following:

1. Fire the general manager and promote from within the station. In addition, hire at least two full-time sales people. Suggestions were made for specific individuals to hire for these positions. (It must be noted that the owners knew a problem existed with the manager, and they did in fact want him out. The owners wanted support for their decision).
2. Fire the station's secretary and hire a person who could function in areas other than typing letters. The small station required flexible employees, and the secretary did not fit this description.
3. Develop a station policy book explaining job requirements for each position at the station, expectations of employees, basic conduct, and so on. A sample policy book was provided to the station owners.
4. Facility recommendations included: eliminate three of the four telephone lines; eliminate the music service, periodical subscriptions, three of the four news wires, and some of the automated equipment.
5. Programming: attempt to provide more local programs with remotes, and other special programs.
6. Promotion: several suggestions were

provided to promote the station without spending large sums of money.

7. Suggestions were made on how to "clean-up" the monthly financial statement, which was nearly impossible to decipher.

8. Other services provided to the station included: (a) A sales presentation to sell year contracts was demonstrated to the owners, and copies of the presentation were given to them; (b) A business image survey was constructed and instructions were given on how the survey might be used to help increase sales staff awareness of local business; (c) A basic audience survey was developed, as well as instructions on how the survey should be conducted and what the results could mean to the station; (d) A new rate card was developed; and (e) A list of 10 guidelines (philosophies) were developed for the sales staff, including such things as sticking to the rate card, no deals, and so on.

Results of the consultation: Almost all of the recommendations were accepted by the station owners. Ninety days later, the station showed its first profit ever, and is still profitable today.

The example, hopefully, indicates that consulting may take one of several forms. The case study shows that an objective viewpoint was required at this station. The owners knew what problems existed, but they needed a third party evaluation to support their ideas. The consultation consisted primarily of asking questions, and it was a job which did not require a full-time consultant.

Summary

The basic position taken in this paper has been that the part-time consultant should not try to compete with the full-time consultant or network research department. A part-time consultant can be more helpful to broadcasters if he deals with relatively small projects, or develops questions that other consultants can investigate.

Part-time broadcast consulting can be very rewarding. The specific goals of the consultant are most important. An academician must decide early what he intends to accomplish in the consulting field.

Finally, a part-time consultant should have complete command of the research procedures he is attempting to sell to broadcasters. There is no question but that some researchers have engaged themselves in projects beyond their capabilities. A professional part-time consultant must recognize his own limitations and know when to suggest another service or organization.

(**Note**: The author wishes to thank the following individuals for their helpful suggestions in the preparation of this paper: Phil Brown, Sales Manager, WMAL Radio, Washington, D.C.; Charles DeBare, President, ABC AM radio stations, New York; Dr. James Fletcher, University of Georgia; Jack Lenz, Sales Manager, WSB Radio, Atlanta; Sherril Taylor, Bonneville International Corp., New York; Terry Rodda, Sales Manager, WLS Musicradio, Chicago; and Scott Trentadue, General Sales Manager, WFAW AM—FM, Ft. Atkinson, Wisconsin.)

Viewdata:

Print joins world of telecommunications

By PAUL PRINCE
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Many of us have become jaded by the blue sky promises made for each new technological "revolution." In the late 1960s, we were promised home video. In the early 1970s, pitchmen and visionaries extolled cable television's limitless capacity. In 1980, we have viewdata, the interactive "electronic newspaper." Viewdata promises to blend the functions of print journalism with the rapid distribution capabilities of the telecommunication media.

Viewdata (sometimes called videotex) is the generic term for a variety of systems that provide printed and graphic material displayed in color on the subscriber's television receiver or monitor. It is distributed over telephone lines from a central computer. Viewdata systems are interactive, allowing the subscriber first to search for, then to order and hold on the screen the desired information. (1) Hard copy home printers are available. Cable television distribution is likely in the future. Viewdata is truly an electronic newspaper and an encyclopedic information source. Viewdata should not be confused with closed captioning or with teletext, both of which are broadcast systems, are as yet non-interactive, and are limited in the amount of information they provide. Viewdata is not broadcasting, but the implications of an instant print service are not lost on broadcasters.

Just as U.S. publishers are watching viewdata developments closely, lest they be left behind, several universities have begun seminars and research on viewdata. The opportunities for graduate theses and for faculty consultation seem particularly good since there are no established U.S. experts. This is a multidisciplinary adventure, and departments that combine print and telecommunication expertise are better suited to evaluate viewdata than are most newpaper companies.

It is tempting to dismiss viewdata as merely the latest blue sky promise. However, my own skepticism was considerably lessened by a three hour demonstration-discussion of the Canadian Telidon system held in Dallas last May. Certainly there are several aspects of viewdata that should be considered before casting it into the wastebin of technological marvels.

First, viewdata is well along in its test stages. Unlike other recent electronic innovations, viewdata did not originate in the United States. A system was developed in Britain (Prestel) and has been operated for eight years by the British Post Office. Similar systems have been adopted in France, West Germany and Japan. A second generation is under development and is being test marketed by the Canadian Department of Communications. The Canadian Telidon system is a major refinement on Prestel in terms of its stunning color graphics. (2)

A second indicator of viewdata viability in the U.S. is the interest shown by domestic companies. The Knight-Ridder newspaper group has an experimental system, Viewtron, in its headquarters city of Miami. Other newspaper groups and publishers are watching Knight-Ridder as the indicator for their own jump into or back from viewdata.

A third indicator is the current proliferation of specialized services using cable television. The full potential of viewdata can be realized with broadband coaxial or optical fiber links. As cable offers 20 or more channels including two pay channels and 24-hour-a-day sports, the reality of an interactive electronic newspaper no longer seems blue sky. In a Dallas suburb, Sammons Cable and The Dallas Morning News are offering a data retrieval network with access to the Dow Jones news and financial services, a DMN service, and Merrill Lynch brokerage information. (3)

The Technology: The viewdata systems in Europe, Japan and Canada employ telephone line interconnection from a master computer data bank to the home or

business video terminal. The home consumer systems offer access through two technologies already available: the telephone receiver and the television set. The phone handset is placed in a coupler, and the user's access number is dialed to reach a data bank. THe terminal is a standard home TV set.(4) The TV set may be modified or simply connected through the RF terminal. You select TV or viewdata with the flick of a switch. For business use, such as in-house communication, specially designed monitors are available. A home computer (such as offered by Radio Shack) may also serve as a terminal.

To allow the consumer to request information from the data bank, an ordering device (called a "keypad") the size and format of a hand calculator is commonly used. A complete keyboard could be used for businesses that offer significant original input. Using the keypad, the consumer punches in order code numbers to first call up a "menu," or general table of contents. Still using the keypad, categories are selected from ever-narrowing tables of contents until the specific category or item is found. Each of these categories is called up by pressing one or two digit numbers on the keypad as indicated on successive menus. With Telidon, for instance, the box score for last night's Royals-Angels game could be found by requesting **Entertainment** on the general menu, then in succession **Sports, Baseball, American League West, Scores, Box Scores, Royals-Angels.**

It is necessary to "grab" and hold the requested information on the screen. For this, Telidon offers a micro-computer wired to the home set or designed into special monitors. (Canadian consumer sets will soon be offered with integrated micro-computer for Telidon.) The micro-computer (the decoding terminal) holds the information display until the user signs off or requests new information using the keypad. Once the home microcomputer acquires the information, the telephone may be hung up to save line charges. If a computer game ("Starwars") has been ordered, the micro-computer can play the game with no further contact with the master computer.(5)

Using this same technique, the consumer may access information from any number of data banks anywhere in the world. The Canadian Telidon representatives assume that various "information providers" will establish regional data banks. For instance, Knight-Ridder's Miami data bank, **The Dallas Morning News**, and the Dow Jones national service might all be interconnected. This is a marketing question, not a matter of technology.(6)

The Content: This all sounds like the "wired nation" revisited or just more McLuhanism wafting across our northern border. Whether viewdata flourishes in the United States or toddles along as did the infant home video industry during the past decade depends on how the systems are marketed. In particular consumer acceptance depends on content. Who will be the information providers? Judging from eight years of experimentation in the British Prestel system, the following scenario is proposed for the United States: at first, highly edited content from national news sources, wire services brokerage houses, weather services, and such interactive services as airline ticket reservations. Next to come on board will be big city newspapers which will create data banks in their own markets as well as continuing the national services. Also joining this second level will be special information sources such as Time-Life Publications, which can provide content with minimal reworking of material. Add to this regional magazines which offer life style information, educational and governmental agencies.

The third level of development envisions the birth of unique firms that buy and broker large amounts of data bank space (happening now in Britain) and serve as middlemen or even editor-publishers for sources.(7) The fourth level, which can develop concurrently with the above, involves utilities and protection agencies

Early photograph gift

The Broadcast Pioneers Library in Washington, D.C., has received a gift of about 10,000 early television photographs from the St. Louis **Post-Dispatch**.

The photos are of television personalities and programs from the 1940s to the 1960s. Many of the celebrity photographs feature stars who were also popular radio entertainers. Included in the collection are a number of motion picture scenes of the 1930s and 1940s.

The new "St. Louis **Post-Dispatch** Collection" brings the Broadcast Pioneers Library's radio-television photo archives to a total of 20,000.

that monitor meter and alarm data from homes and businesses. Proponents of Telidon see utilities companies underwriting some of the cost of two-way broadband cable links. We heard that idea 10 years ago as part of the wired nation, but it is still a good concept

Which comes first, the consumer or the information provider, is the critical question. The answer was voiced clearly during the Telidon meeting in Dallas by Patrick Perkins of SED Systems, Saskatoon, a Telidon licensing company, and by Roy Marsh of the Department of Communications, which developed Telidon. Consumer acceptance will follow useful, relevant, well formatted content.(8) This is a healthy attitude learned from past failures of technology to "sell itself."

The Costs: The initial cost of a Telidon decoder is about $1,200, but the price has been dropping steadily. With several thousand terminals projected on line in 1981 in Canada alone, prices should be reasonable before large scale U.S. tests begin. The consumer's costs include telephone bills, though with anticipated local-regional data bases, only local service would be involved. However, the consumer cannot converse on the phone when it is in the viewdata coupler, another advantage of cable TV connection. Psychological "costs" to consider include privacy of the system when the data bank is used to store messages from one viewdata user to another (though today's phone call is hardly a secure medium). The specter of alienation reappears from the shades of the wired nation when considering viewdata as a tool with which we shop, bank, and play games.(9)

The Implications: While viewdata with its vast data base is seen as a supplement to print services, few would suggest that it will replace today's newspapers, even those in financial trouble. Tom Holbein, Senior Vice President for Belden Associates, a Dallas consulting firm, advises his clients to strengthen existing editions while considering viewdata as a supplemental headline or classified ad medium. It is doubtful that we can accept our newspaper converted to an image on a CRT.(10) However, those in the 18-34 age bracket who watch little TV news and who read newspapers even less may find a service of headlines, sports scores, and advice columns which is up-to-date and on demand well worth their investment in viewdata. This skimming of information may weaken some papers, but it is also a threat to broadcasters who see their advantage of timeliness eroded and their audience further fragmented. If only to hedge their bets, publishers and broadcasters will move into some form of viewdata just as they moved cautiously into cable television. Such a hedge may become a self-fulfilling prophecy.

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The electronic revolution: a warning

By BILL WALLISCH, Lt. Col.
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In publication after publication I've read editorials that sing the praises of the "electronic revolution." This isn't one of them. As a matter of fact, it's a warning.

Now I know about all of the advantages this revolution offers. Advanced communication can help greatly in the energy mess, for example. Through teleconferencing, executives need not travel thousands of miles. They merely tie their conference tables together with a satellite and—presto—they're face to face. With an electronic blackboard or a telex, they can pass on printed information, too.

And there's fiber optics. This cheap replacement for all of that copper cable lets us tie so much together at a fraction of the cost, with even better technical advantage.

The satellites and the fiber cable will eventually tie in our homes, too. We'll see the demise of the major networks and cable will be king. QUBE, that miracle of interactive television, is the prototype of home entertainment that will offer practically unlimited choices. And we'll be able to talk back and make our thoughts known! All wonderful.

Education? Well, we'll be able to dial up professor so-and-so at MIT or Cal. Tech., and take the best course in the country without leaving the house. The exam will be part of the electronic package, too. From grade school to graduate school—going on campus might really become passe.

Every home will have a computer, too. The video display screen, the computer, and the audio communication system will be that dream package that promises to free us of travel to the supermarkets or the bother of balancing the checkbook. We, too, will be able to see the person we're calling on the phone. We'll all be tied together.

Video disc offers yet other possibilities. More courses, old movies, new movies, and unlimited packages of sight and sound will be available in a disc form. So many possibilities.

Well, so far, this does sound like one of those editorials. It sounds like one of my lectures, too. Every year I add to the list of wonders I tell my television students about. And they write their papers about them. We even try to imitate some of these things on our own student program, the **Blue Tube**.

But lately I find my lectures contain a sort of chilly warning. And the papers, too, seem a bit sour, even though they still stand in awe of what might be possible through electronic technology.

What's going wrong? Nothing, really. Nothing's happened. Yet. We're just thinking about what could happen if the managers of that new technology don't take just a moment to think all of it out. We know they've given the circuits careful thought, and the costs, and uses of the systems—but we're wondering if they've thought about the consequences of it all.

For example. If QUBE asks questions about its households each night before they begin to "Touch Now," what will it do with all of that statistical information? I mean the "how many people are there with us," "how many men and how many women," and "what are your ages" kinds of questions eventually will yield quite a data bank. And if the computer knows who's watching and what they watch—well, it's going to learn a lot about those people, their tastes and habits. It can record votes for this and that; it can evaluate and record trends.

And if we sit more in front of the screens and displays we might walk less into each other's lives. Not that passing each other in metal boxes on the highways is all that great, but I wouldn't want anything to replace getting outside. Too bad, really, if our young people don't get on campus sometime, even though better lectures might be possible at home over the new systems.

I'm reminded of the last pages of Ray Bradbury's **Fahrenheit 451**. Everyone has at least a wall or two of what might be called television. It can be holographic, and even interactive, if you've got enough cash. Imagine, the soap opera characters are right there with you (full size!) and will even turn and ask your opinion.

Feedback forum

Despite wars that rage outside, this is really where the action is: with that Big TV set.

McLuhan told us a few years ago something like: the old medium will always be the first content of the new one. I really understood that one day when I gazed down through a glass case at a Gutenberg Bible. My gosh, the Gutenberg was a printed replica of the kind the monks had so lovingly and laboriously created by hand. The new medium—print—taking the old hand done bible as its content. Then movies took novels for content. Finally, TV took movies as content. It really works out.

But through all of that, in all of those media that have come down through the ages, a common content has been symbols dealing with life. As a kid (I'm a typical media baby) I used to love to press my ear to a low radio speaker in the night and listen to far off places. I was supposed to be sleeping, but instead I was listening to all those voices. It seemed as if peoplekind carried on this conversation for anyone who would listen, regardless of the hour. Though most of us slept we could be reassured of that fact that our species was talking on the airways, not ever giving up the reins of the sleeping world.

And it came to us the other day in class that the ultimate content of the media has always been us, the human beings who wrote the words, the stories, and the songs that fill the books, the airways, and the screens. We're the content of the old medium and whatever new medium there might be.

But back to Bradbury's medium of the future, to the glowing editorials we read each month, and my classroom.

Before we step into four walls of electronic magic, a magic that holds such unlimited potential, I think we'd better make sure we're not going to step into an electronic nightmare. Because we are and always have been the ultimate content of our media let's make sure we finally are not consumed by it. We must make sure that we can tell the difference between the electronic characters and ourselves. I don't want to be caught up in an electronic hall of mirror images of myself each time I try to find the exit to real life.

From a holograph, I'm not going to get love, compassion and understanding. I'll get an image as cold as the mirror's surface. And even though I can talk back or press my console, with what or whom will I be talking? A programmed voice? And if I can vote for an issue or a public official, will my vote be later "reported" to someone? Will I be reminded that I didn't watch when I should have? Don't forget, the computer knows when we aren't watching.

We may see some warning signals already. There are roughly 146 million television sets in America. Half of us own two sets, as a matter of fact. And we watch those screens on the average of 45 hours a week. That's a lot of sets, a lot of time devoted to watching them.

I know the printed word has caused kings and popes alike to react with outrage; heads have rolled because the printed medium dared make its point. That point has had a dramatic impact upon human kind is understatement. Movies, too, have changed opinion and created perceptions about out very way of life. Radio has had considerable influence. Each medium has made its mark, taken its toll in term of influence and perception.

But it seems somehow that TV has an appetite for its content like no other of these media. Researchers will tell you that its early appetite for boxing nearly destroyed the sport. More recently we've seen political candidates eaten alive by the cameras. Muskie cried on the screen, for example, and lost any hope of a serious candidacy. Others, too, fell swiftly because of a single media slip. The examples are legion.

A lot of this probably is done without either malice or deliberate forethought. It's not a case of premeditated murder. But it does happen. And a stronger medium—four walls of interactive holographic image tied to a computer—lays open the possibility of more sophisticated and lasting damage.

That's the way it's been going in class lately. We're still reading the glowing editorials, and we're just as excited as those authors about the potential of fiber optics, satellites, cable TV, video discs, telex, computers, teleconferences, and digital technology. But we're cautious, too.

I think the communication teacher has the responsibility to put that chill into the air of the classroom. Students, too, have the responsibility to stand back and carefully examine the implications of the new technology. These students will become the managers of the systems. It is essential that they do so with a deep concern for human privacy.

Teaching television and mass communication theory is truly a gee-whiz experience these days. But it is mandatory that it also be "what if."

Revised wire service phonetics

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At the 1979 BEA Convention in Dallas broadcasting students were heard to object to the requirement at their school to learn the International Phonetic Alphabet. Where a few years ago it was stylish to disagree with the establishment, this is no longer the case. "Conform and succeed" would seem to be the philosophy of most of today's students. So, when student dissatisfaction is heard, it bears investigation or analysis.

Phonetic transcription plays an important role in broadcast education at many schools.(1) Many phonetic methods have been devised. Some broadcasters have their own systems. Yet, one generally accepted phonetic transcription system would provide the greatest benefits for the news, sports and advertising uses of broadcasters. What are the alternatives?

Four alternatives immediately come to mind:

1. Students can be expected to learn the International Phonetic Alphabet with its many unusual symbols, as is now done in some schools.(2)
2. A system using diacritical markings can be used as the standard for phonetic transcription.
3. Another possibility is the somewhat illogical, though quite functional, currently used wire service phonetics.(3)
4. A modified form of wire service phonetics can be adopted.

The **International Phonetic Alphabet** is logical for use by students and faculty, especially where the discipline has grown from a speech and drama department already using this method of transcription. It is especially good for the accurate pronunciation of foreign names or words. However, very seldom is the exact correct foreign pronunciation really what the broadcaster is expected to use. Most often it's an Americanized version that is pronounceable to American speakers and perceivable be American ears. The primary objection to the IPA may be that it takes a student's time to learn a system which cannot be reproduced by a standard typewriter or teletype machine and that is not generally used by broadcasters in the field.

Diacritical Markings: Dictionary markings can be learned if one dictionary is accepted as the standard to be used for reference. And even though lexicographers can't agree on a most desirable system,. some broadcasting instruction is taught this way. Brown Institute in Minneapolis has turned out many successful broadcasters, teaching students to use the Random House Dictionary and its diacritical markings.

The UPI-AP System: Those advocating use of the current UPI-AP system of phonetic transcription have many points in their favor: (1) it is currently used by the industry; (2) it is possible to reproduce on a standard typewriter; (3) it can be transmitted on the news teletype machine; and (4) the UPI-AP system is fairly easy to comprehend in most cases without lengthy study.

With all these things going for it there seems little question that this method should be used by broadcasting students. But if standards were to be set up as to logic and consistencey the UPI-AP system has some shortcomings.

In order for the system to be immediately recognizable by any reader and for it to be easily transcribed, two criteria need to be adhered to: (1) Standard phonetic sounds as learned by students learning to read—sounds already known by students—should be used as they commonly appear in the language; and (2) consistent use of letters for sounds is essential, especially where one or more consonants are added to a vowel to modify its basic pronunciation.

Since the currently used UPI-AP phonetics do not fully conform to these criteria, a revised wire service phonetics system is suggested.

Consonant sounds would be much the same as those used in the IPA or UPI-AP systems with the exception of the addition of "t—h" used to transcribe the hard t-h sound as in **this** or **that**. The use of "th" without a slash remains as the soft t-h sound as in **think** and **thought**.

Most of the lack of uniformity comes with vowels. In elementary school students are taught "a" as in **cat**, "e" as in **wed**, "i" as in **fit**, "o" as in **got**, and "u" as

in nut. There would seem to be no need to change some of these as the currently used system does by adding an "h."

The Redundant "H": In addition, the redundant "h" is not used in a consistent manner by the UPI-AP system. Added to "a," the "h" produces the "au" sound as in father, a semi-broad "a" which in some instances may be hard to distinguish from the broad "a" as in saw.

Added to a "e" or "i" the added "h" indicates the short form of the vowel, as in let or fit. Perceiving an "h" added to an "o," the reader is expected to pronounce the long form of the vowel as in boat.

Stranger still, "h" added to "u" produces a sound terminated with an "f" sound as in trough. (In the NBC Pronunciation Handbook "uh" has the schwa sound, as in nut. (4)

The Revised System: Alternatives to the redundant "h" are to be found in a proposed revised wire service phonetics system. The "h" following a vowel is eliminated in all cases except after the "o." This vowel-"h" use does not meet the first criterion set up to the degree desirable, but since "ow" can stand for two commonly used vowel sounds "know the flow when you row" must give precedence to the more common "how now brown cow." "O-h" is readily

REVISED WIRE SERVICE PHONETICS

A SOUNDS:

A	CAT
AY	FADE
AI	FAIR
AU	FATHER
AW	SAW
U	(unaccented) ABOVE, ARENA

I SOUNDS:

I	FIT
IGH	TRITE
U	(unaccented) TAMIR
UR	GIRD, BURN

C SOUNDS:

CH	CHEAP
S	PREFACE
K	COOL

N SOUNDS:

N	PHONE
NG	RING
NY	NEWS

Q SOUNDS:

KW	QUICK
K	RAQUET

X SOUNDS:

S	XERXES
KS	NEXT

E SOUNDS:

E	WED
EE	TREAT
EW	STEW
U	(unaccented) EFFECT, AFTER
YEW	NEWS
UR	EARN, TERM

U SOUNDS:

U	UP
YEW	EDUCATE
UR	BURN, GIRD
U	(unaccended) CIRCUS, WELCOME

G SOUNDS:

G	GOOD
J	GENTLE
F	ENOUGH

P SOUNDS:

P	PUT
F	PHASE

T SOUNDS:

T	TRIP
TH	THINK
T/H	OTHER

Z SOUNDS:

Z	ZOO

O SOUNDS:

O	TOP
OH	DOPE
OI	BOY, BOIL
OO	LOOK
EW	STOOP
OW	COW
U	(unaccented) FAVOR, MINOR

Y SOUNDS:

Y	YELLOW
IGH	WHY
EE	LATELY
I	BICYCLE

J SOUNDS:

J	JAM
ZH	RAJAH

S SOUNDS:

S	SLED
SH	SHEEP
Z	NEWS
ZH	VISION

W SOUNDS:

W	WAY
HW	WHEN

SINGLE-SOUND LETTERS

B, D, F, H, K, L, M, R, V

recognized as the long "o," however, since it is commonly used for the exclamation "oh!" as in "oh-oh, oh-you beautiful doll." For the "ough" sound as in trough, this system system would transcribe the sound as "o-f" (the "o" in got and "f."

Other changes from the current UPI-AP system include single letters for the short sound of the vowel; "au" for the "a" sound in father; the use of "igh" for the long "i" as in night, sight, fright...etc.; "ew" for the vowel sound in stoop; the "oo" to represent the sound in foot. "U" followed by an "r" takes on the sound of the vowel-consonant combination in burn.

The revisions are few, but they bring logic to the system.

Reasons for Adoption: Basically there are four reasons that the proposed revised wire phonetics should be the standard phonetic system taught for broadcasters in the college and university.

1. Revised wire service phonetics are easily learned with little or no special instruction giving students valuable time for other studies such as vocabulary.
2. The system is adaptable to the standard typewriter and to the standard teletype machine and computer keyboard.
3. It can be readily adopted by current broadcasting writers with a simple revised reference.
4. The revised system allows accurate representation of the sound of American English words and names in the manner generally accepted as "correct" in the United States.

Critics Answered: Critics claim that wire service phonetic pronunciations are "only approximate." That's probably true, but even with IPA very seldom is it possible to have absolutely correct pronunciations on which all authorities agree due to differences and preferences of individuals, changing usage, regionalisms and the presence of the electronic media. Check any two dictionaries. Even these "absolute" authorities have trouble agreeing on the fine points of syllabication and pronunciation especially of foreigen names and words where most of the advantage might be claimed for the more exacting IPA. Changing foreign words to American sounds will always be an approximation.

With the information explosion it is important that students not be overburdened with learning unnecessary skills or relearning basic skills concepts. By adopting the revised wire service phonetics we are lowering one more hurdle to allow students a better chance to attain a broad base of knowledge.

FOOTNOTES

1. Edward Bliss, Jr. and John M. Patterson, **Writing News for Broadcast**, Columbia University Press, 1971, pp. 39-48.
2. Stuart W. Hyde, **Television and Radio Announcing**, 3rd ed., Houghton Mifflin, 1979, pp. 58-65.
3. Arthur Wimer and Dale Brix, **Workbook for Radio and TV News Editing and Writing**, 4th ed., Dubuque, Iowa, 1975, p. 38.
4. Thomas Lee Crowell, Jr., **NBC Handbook of Pronunciation**, 3rd ed., Thomas Y. Crowell Co., pp. ix-xiii.